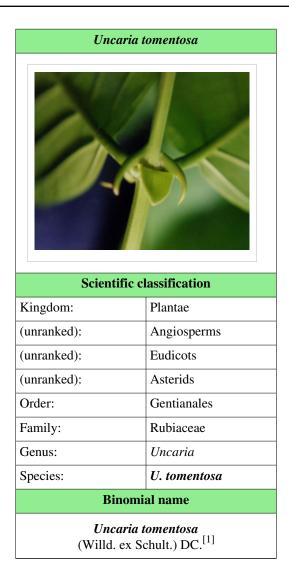
# Uncaria tomentosa



*Uncaria tomentosa* (popularly known in English as Cat's Claw, although that name is also used for various other plants; in Spanish as Uña de Gato or as Indian name Vilcacora) is a woody vine found in the tropical jungles of South and Central America, which derives its name from its claw-shaped thorns. It is used as an alternative medicine in the treatment of a variety of ailments. Other common names include: hawk's claw, pot hook, and sparrowhawk nail.

## **Description**

*Uncaria tomentosa* is a liana deriving its name from hook-like thorns that resemble the claws of a cat. *U. tomentosa* can grow up to 30 m (100 ft) tall, climbing by means of these thorns. The leaves are elliptic with a smooth edge, and grow in opposite whorls of two. Cat's claw is indigenous to the Amazon rainforest, with its habitat being restricted primarily to the tropical areas of South and Central America.

## **Taxonomy**

There are two species of Cat's Claw, *Uncaria tomentosa* and *Uncaria guianensis*, each having different properties and uses. The two are frequently confused but *U. tomentosa* is the more heavily researched for medicinal use<sup>[2]</sup> and immune modulation, while *U. guianensis* may be more useful for osteoarthritis.<sup>[3]</sup> *U. tomentosa* is further divided into two chemotypes with different properties and active compounds, a fact ignored by most manufacturers<sup>[4]</sup> that can have significant implications on both its use as an alternative medicine and in clinical trials to prove or disprove its efficacy.<sup>[5]</sup>

#### **Medicinal uses**

The parts used medicinally include the inner bark and root, taken in the form of capsules, tea and extract.

*U. tomentosa* is used in nootropic drugs and against HIV infection. It contains several alkaloids that are responsible for its medical effects, as well as tannins and various phytochemicals. <sup>[6]</sup> The chemotype of the plant determines the dominant type of alkaloid it produces, and thus its properties *in vivo*. One chemotype has roots which produce mostly the pentacyclic alkaloids that are responsible for the immune-strengthening effects desired by most consumers. The second chemotype produces tetracyclic oxindole alkaloids known as rhynchophylline and isorhynchophylline which counteract the immune-strengthening actions of the pentacyclic alkaloids, reduces the speed and force of the heart's contraction, and in high doses produce ataxia, lack of coordination and sedative effects. <sup>[5]</sup> Since *U. tomentosa* comes in at least these two different chemotypes, without chemical testing it is impossible to know which chemical compounds will predominate in a plant collected randomly from a natural setting.

Some ingredients appear to act as anti-inflammatory, antioxidant and anticancer agents. As a herbal treatment, Cat's Claw is used to treat intestinal ailments such as Crohn's disease, gastric ulcers and tumors, parasites, colitis, gastritis, diverticulitis and leaky bowel syndrome. Manufacturers claim that *U. tomentosa* can also be used in the treatment of AIDS in combination with AZT, the treatment and prevention of arthritis and rheumatism, diabetes, PMS, chronic fatigue syndrome, prostate conditions, immune modulation, Lyme disease and systemic lupus erythematosus.

However, all the studies on its effect on rheumatoid arthritis were small, the effects were modest at best, and need confirmation in standardized trials. [11]

#### **Indigenous use**

The indigenous peoples of South America have used *U. tomentosa* for medicinal purposes for two thousand years or more. It is often added to Ayahuasca. Researchers have investigated the use of the plant by the Asháninka tribe of Peru, who use the plant as a general health tonic, contraceptive, anti-inflammatory agent for the gastrointestinal tract, and as a treatment for diarrhea, rheumatic disorders, acne, diabetes, cancer and diseases of the urinary tract.<sup>[12]</sup> In Brazilian traditional medicine it is used against dengue to reduce inflammation.<sup>[13]</sup>

## **Allergies and Adverse Reactions**

Individuals allergic to plants in the Rubiaceae family and different species of Uncaria may be more likely to have allergic reactions to Cat's Claw. [14] Reactions can include itching, rash and allergic inflammation of the kidneys. In one case study, kidney failure occurred in a patient with Lupus erythematosus. [15] The patient's kidney failure improved after stopping the herbal remedy.

There are other plants which are known as cat's claw (or uña de gato) in Mexico and Latin America; however, they are entirely different plants, belonging to neither the Uncaria genus, nor to the Rubiaceae family. Some of the Mexican uña de gato varieties are known to have toxic properties.<sup>[16]</sup>

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### **External links**

 M.D. Anderson - Detailed Scientific Review of Cat's Claw (http://www.mdanderson.org/ education-and-research/resources-for-professionals/clinical-tools-and-resources/cimer/therapies/ herbal-plant-biologic-therapies/cats-claw-scientific.html)

- Germplasm Resources Information Network: Uncaria tomentosa (http://www.ars-grin.gov/cgi-bin/npgs/html/taxon.pl?403273)
- Uncaria tomentosa List of Chemicals (Dr. Duke's Databases) (http://sun.ars-grin.gov:8080/npgspub/xsql/duke/plantdisp.xsql?taxon=1972)

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